



U.S. Department
of Transportation

**Federal Aviation
Administration**

Advisory Circular

Subject: CERTIFICATION OF TRANSPORT
CATEGORY ROTORCRAFT

Date: 9/30/99
Initiated by: ASW-110

AC No: 29-2C
Change:

1. PURPOSE:

a. This is a total revision of AC 29-2B dated 7/30/97, with Change 1 dated 9/30/98, incorporated. In addition, new material plus changes to existing paragraphs are incorporated. This consolidated version is now renumbered as AC 29-2C and replaces AC 29-2B in its entirety. This revises existing material in 12 paragraphs, adds new material for two paragraphs, and renumbers paragraphs to correspond with Federal Aviation Regulations (FAR) numbering.

b. Requests from the rotorcraft industry to make the document easier to use resulted in renumbering the AC paragraphs to correspond with FAR numbering. The figure numbers are also renumbered accordingly.

c. This AC does not change regulatory requirements and does not authorize changes in, or deviations from, regulatory requirements. This AC establishes an acceptable means, but not the only means, of compliance. Since the guidance material presented in this AC is not regulatory, terms having a mandatory definition, such as "shall" and "must," etc., as used in this AC, apply either to the reiteration of a regulation itself, or to an applicant who chooses to follow a prescribed method of compliance without deviation.

d. This advisory circular provides information on methods of compliance with 14 CFR Part 29, which contains the Airworthiness Standards for Transport Category Rotorcraft. It includes methods of compliance in the areas of basic design, ground tests, and flight tests.

2. CANCELLATION. AC 29-2B, Certification of Transport Category Rotorcraft, dated 7/30/97, is canceled in its entirety.

3. BACKGROUND. Based largely on precedents set during rotorcraft certification programs spanning over 40 years, this AC consolidates guidance contained in earlier correspondence among FAA headquarters, foreign authorities, the rotorcraft industry, and certifying regions.

4. PRINCIPAL CHANGES:

a. Chapter 3 is now titled "Miscellaneous Guidance (MG), Transport Category Rotorcraft," with the following changes:

- Paragraphs that correspond to a FAR number are merged into existing AC text in Chapter 2.
- Paragraphs that do not correspond with a FAR number either remain in Chapter 3 and are renumbered as MG paragraphs, or are now an appendix.
- In order to stay aligned with FAR numbering, Appendices A, C, and D are reserved for future AC material.

b. Paragraphs revised to incorporate technical guidance are AC 21.35, 29.561, 29.610, 29.863, 29.952, 29.1093, 29.1305, 29.1309, 29.1351, 29.1353, and MG 4 (FADEC). Paragraph AC 29.661, Rotorblade Clearance, contains new material added as a result of National Transportation Safety Board (NTSB) recommendations.

c. New paragraphs added are 29.602, Critical Parts, and MG 12, External Loads. These paragraphs correspond with recent harmonized regulatory changes. Also, figure 29.863-1 is new.

d. The AC is now divided by Subparts and page numbers reflect the relevant FAR Subpart.

e. "FAA/AUTHORITY" as used in this document means FAA or another airworthiness authority that has adopted this AC as a means of compliance with the appropriate regulation referenced.

5. DEVIATIONS. As rotorcraft designs vary from conventional configurations, it may become necessary to deviate from the methods and procedures outlined in this AC. These procedures are only one acceptable means of compliance with Part 29. Any alternate means proposed by an applicant will be given due consideration. Applicants are encouraged to use their technical ingenuity and resourcefulness to develop more efficient and less costly methods of achieving the objectives of Part 29. Regulatory personnel and designees should respond to such efforts by the use of engineering judgment in fostering any such efforts as long as the letter and spirit of Part 29 and the Federal Aviation Act are respected. It is recommended that unusual or unique projects be coordinated a sufficient time in advance with the Rotorcraft Standards Staff, ASW-110, or the appropriate airworthiness authority, to ensure timely and uniform consideration.

6. APPLICABILITY. This material is not to be construed as having any legally binding status and must be treated as advisory only. However, to ensure standardization in the certification process, these procedures should be considered during all rotorcraft type certification and supplemental type certification activities.

7. PARAGRAPHS KEYED TO FAR PART 29. Each paragraph has the applicable amendment to Part 29 shown in the title. All of the original guidance material has been retained as appropriate, even as changes are made to the regulations. This is accomplished through the use of "A," "B," etc., paragraphs, which follow the original numbered paragraphs. These subsequent paragraphs provide updated guidance information or changes to policy that parallel a specific rule change. The guidance material in the original paragraph (for earlier amendments) still applies and is modified as explained in each of the later paragraphs for later amendments. The applicable amendment number will only appear in the title line for the "A," "B," etc., paragraphs. The guidance material in the initial paragraph is intended to apply to all amendments except as modified by the later paragraphs. Each ensuing "A," "B," etc., paragraph will be identified with an amendment level to indicate the rule change that precipitated the policy change.

8. RELATED PUBLICATIONS. FAA Certification personnel and designees should be familiar with Order 8110.4, Type Certification, and Order 8100.5, Aircraft Certification Directorate Procedures.



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